Landfill Gets a Cap

As part of the Colbert Landfill closure, a protective membrane will be installed this Spring that will encase the landfill area and prevent rainwater and snowmelt from leaching through the landfill and into the ground below.

This plastic membrane will be placed over the landfill and direct runoff water to areas where it can safely enter the ground.

This is the last major step in the cleanup efforts of the landfill.

The cap is actually a composite cover made up of four layers. The bottom layer is composed of material free of large rocks that may puncture the liner. The second layer is the liner itself, which consists of 60 mil thick plastic. The rolls of plastic, 22 feet wide and 300 feet long, will be rolled out onto the landfill.

The large sections of plastic are "welded" together using a special process.

The third layer is then laid over the plastic cover. This layer is made up of sand to allow for drainage and will measure about 18 inches in thickness.

The fourth layer is composed of six

inches of topsoil that will then be hydroseeded with drought resistant grass and wildflowers. This layer is designed to stabilize the cover to prevent erosion and exposure of the underlying layers.

Beneath the cap a landfill gas collection system will be in place.

The purpose of the landfill gas collection system is to simply vent the landfill of escaping gasses due to the decomposition of the

refuse in the landfill.

The gas will be collected through a series of underground trenches to prevent gas build-up. These trenches will carry the gas to a treatment facility, which will be constructed on the landfill site.

The treatment facility will filter the gas through an activated carbon system designed to reduce any harmful elements in the gas.

Around the perimeter of the landfill cover system, a perimeter drainage system will be constructed.

This perimeter system drains storm water to a large pond located northwest of the landfill area.

A perimeter access road will be constructed north of the landfill cover system to provide maintenance access to an existing groundwater extraction system pump station

Erosion protection will be provided to areas at the landfill site disturbed by construction activities.

A perimeter fence will be installed around the new construction as well.



Crews will install a cap at Colbert similar to the one pictured above.

This Newsletter is prepared by Spokane County Public Works in cooperation with the Washington State Department of Ecology and the Environmental Protection Agency





ECOLOGY





Impacts of the Project

Truck Activity, Odor Could Impact Residents

Temporary impacts to area residents as a result of this project will include; traffic congestion, occasional odor problems and dust from truck traffic.

Throughout the construction period, heavy-duty trucks hauling sand, gravel and topsoil will be entering the site at a rate of 10 to 12 trucks per hour. This will be in addition to the trucks arriving regularly to deliver the liner, piping and other construction materials. The contractor, Delhur Industries, Inc., will be responsible to have traffic controls in place including signs and flaggers as needed.

As a result of the installation of the gas collection system, the contractor will be digging into old refuse material. There will most likely be an unpleasant odor associated with this work. To lessen the odor the contractor will perform this operation in a relatively short time frame and try and backfill these areas as quickly as possible. The contractor will backfill all trench excavation on the same day.

The earthwork phase of the project includes placing more than 100,000 cubic yards of material, primarily sand and topsoil. That's the equivalent of 5,000 dumptruck loads.

Delhur Industries will provide measures to control the dust when depositing the sand. They will work to mitigate the impact of trucks during the hauling phase of the project.

Residents should expect the landfill cover work to last from April through November of this year.

During the project if you have questions or want to talk to someone about dust, odor problems from the site, traffic problems related to the capping activity or have any other questions about the capping work please call Spokane County Utilities Project Manager Bill Wedlake at 456-3604. Spokane County and Delhur will work hard to lessen the impact of this project on area neighborhoods.

Colbert Landfill Cleanup Statistics

Contractor: Delhur Industries, Inc. Port Angeles, Wash.

Other Spokane Projects by Delhur: City of Spokane South Landfill Cover System 1988; City of Spokane North Landfill Cover System 1992; Spokane County Mica Landfill 1994. Landfill Design: CH2MHill in conjunction with Taylor Engineering, both of Spokane

Topsoil to be trucked into landfill site: 36,000 cubic yards.

Landfill Cover Material: 77,500 cubic yards.

Geomembrane size: 1,475,000 square feet.

Acreage of landfill: 32 acres

Fencing around landfill project: 4,400 linear feet

Hydroseeding of landfill: 50 acres.



Spokane County Division of Utilities 1026 W Broadway Spokane, WA 99260-0170

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